

continuation-in-part of application serial no. 07/431,664, filed November 03, 1989, now abandoned.--

## IN THE CLAIMS

Please cancel Claims 1-124 and add the following claims under 37 CFR 1.607(a)(4).

--125. A method for mucosally administering a macromolecular drug to the oral cavity comprising applying to the oral cavity mucosa a system comprising an inner drug/enhancer/polymer layer having one surface adapted to contact the mucosal tissue of the oral cavity and adhere thereto when wet and an opposing surface in contact with and adhering to an overlying inert layer, said inner layer containing an effective amount of a bile salt enhancer, from about 29 to 80% by weight of a hydrophilic polymer, and an effective amount of a macromolecular drug.

- 126. A method according to claim 125 wherein said bile salt enhancer is selected from the group consisting of sodium glycocholate, sodium taurocholate, and sodium tauro-24,25-dihydrofusidate.
- 127. A method according to claim 126 wherein said macromolecular drug is a member selected from the group consisting of polysaccharides, polypeptides, and proteins.
- 128. A method according to claim 127, wherein said hydrophilic polymer is a member selected from the group consisting of acrylic acid polymers, maleic acid polymers,

itaconic acid polymers, citraconic acid polymers, methacrylic acid polymers; copolymers of a member selected from the group consisting of acrylic acid and methacrylic acid with a member selected from the group consisting of methyl vinyl ether and lower alkyl methacrylates; and acrylic acid polymers crosslinked with a polyalkenyl ether selected from the group consisting of allyl ether of sucrose and allyl ether of pentaerythritol.

- 129. A method according to claim 128 wherein the macromolecular drug is a polysaccharide.
- 130. A method according to claim 129 wherein the polysaccharide is heparin.
- 131. A method according to claim 128 in the form of a film patch wherein said inert layer is a polymer which is nonadhesive to mucosal tissues and is substantially impermeable to the bile salt enhancer or the drug.
- macromolecular drug to the oral cavity comprising applying to an oral cavity mucosa a system comprising an inner drug/enhancer/polymer layer having one surface adapted to contact the mucosal tissue of the oral cavity and adhere thereto when wet and an opposing surface in contact with and adhering to an overlying inert layer, said inner layer containing from 0% to an effective amount by weight of a bile salt enhancer, about 29 to 80% by weight of a hydrophilic polymer, and an effective amount of a macromolecular drug.

- 133. A method according to claim 132 wherein the bile salt enhancer is sodium taurocholate.
- A method according to claim 133 wherein said macromolecular drug is a member selected from the group consisting of polysaccarides, polypeptides, and proteins.
- A method according to claim 134 wherein said 135. hydrophilic polymer is a member selected from the group consisting of acrylic acid polymers, methacrylic acid polymers, copolymers of acrylic acid with a member selected from the group consisting of methyl vinyl ether and lower alkyl methacrylates, methacrylic acid copolymers with a member selected from the group consisting of methyl vinyl ether and lower alkyl methacrylates, and polymers of acrylic acid crosslinked with a polyalkenyl polyether.
- 136. A method according to claim 135 wherein the macromolecular drug is a polysaccharide.
- A method according to claim 136 wherein the polysaccharide is heparin.
- A method according to claim 135 in the form of a film patch wherein said inert layer is a polymer which is nonadhesive to mucosal tissues and is substantially impermeable to the bile salt enhancer or drug.
- 139. A method for mucosally administering a macromolecular drug to the oral cavity comprising applying to an oral cavity mucosa a system comprising an inner drug/polymer layer having one surface adapted to contact the

mucosal tissue of the oral cavity and adhere thereto when wet and an opposing surface in contact with and adhering to an overlying inert layer, said inner layer containing from about 29 to 80% by weight of a hydrophilic polymer and an effective amount of a macromolecular drug.

- A method according to claim 139 wherein the 140. macromolecular drug is a member selected from the group consisting of polysaccharides, peptides, and proteins.
- 141. A method according to claim 140 wherein said hydrophilic polymer is a member selected from the group consisting of polyacrylic acid, polymethacrylic acid, copolymers of acrylic acid with a member selected from the group consisting of methyl vinyl ether and lower alkyl methacrylates, copolymers of methacrylic acid with a member selected from the group consisting of methylvinyl ether and alkyl methacrylates, and polymers of acrylic acid cross-linked with a polyalkenyl polyether.
- A method according to claim 141 wherein the macromolecular drug is a polysaccharide.
- A method according to claim 142 wherein the 143. polysaccharide is heparin.
- A method according to claim 139 wherein the macromolecular drug is heparin and the hydrophilic polymer is a linear polyacrylic acid resin cross-linked with a member selected from the group consisting of an allyl ether of sucrose and an allyl ether of pentaerythritol .--